

Ledniczky et al. and Rayburn. The Examiner states that Nakajima discloses a sweetener composition comprising acesulfame K and an amino acid. The Examiner states Ebisawa et al. disclose the crystallization of aspartame with amino acids. The Examiner also states that Ninomiya et al. disclose the combination of saccharin and tryptophan. The Examiner notes that the claims of the present invention differ from these three documents with respect to the specific recitation of a salt. The Examiner also notes that Ledniczky et al. and Rayburn teach a salt. The Examiner observes specifically that Ledniczky et al. disclose a salt of a sweetener wherein the salt provides beneficial organoleptic properties. The Examiner also observes that Rayburn discloses a salt of saccharin for improved organoleptic properties. The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to produce a salt from any of the components of Nakajima, Ebisawa and Ninomiya as taught by Ledniczky and Rayburn. This rejection is respectfully traverse for the following reasons.

The present invention comprises a salt of an amino acid and at least one sweetener. It is a novel salt compound like simple table salt – sodium chloride. Nakajima does not disclose a salt. It is not a compound. It is just a mixture of acesulfame K and at least one amino acid elected from a group of about six. It doesn't disclose a salt of: 1) an amino acid, and 2) at least one sweetener.

Ebisawa et al. is a mixture of aspartame and an amino acid. Ebisawa et al. uses the amino acids to inhibit small crystals because only big crystals of aspartame are desired. The final product is not a compound. It is not a salt of amino acid and aspartame. The final product is only big crystals of aspartame. The amino acid is present and never reacts with the aspartame but is only used to prevent the development of small crystals.

Ninomiya is also not a salt but is just a mixture. The mixture consists of saccharin and the amino acid tryptophan.

None of the above three references shows, teaches, or suggests a compound such as a salt. All of these are just mere mixtures. Mixtures still have undesirable bitter tasting amino

acids. It is this bitter taste that the present invention seeks to overcome. The present invention is a compound that has a surprisingly sweet taste which converts the bitter amino acid to a sweet salt.

With respect to Rayburn, it is noted that all the Examples use a hydrochloride salt. There is no indication that amino acids could be used with sweetener to form a salt. Thus there would be no reason to suggest to those skilled in the art that any mixtures suggested by the three primary references could be made into a compound by employing an amino acid salt. As set forth on page 2 of the present application, a particularly strong acid (other than the amino acid) is needed to convert the sweetener by protonation into a component that can form a compound with the amino acid. Rayburn uses no amino acids. He doesn't form a compound with an amino acid and a sweetener. Rayburn does not teach one skilled in the art that the key to forming an amino acid-sweetener salt is a strong acid.

Rayburn does not have NMR data to show uncontroversially that a salt compound is formed. It merely mixes two different compositions and says a salt compound forms. Rayburn uses melting point analysis to show that the melting point is between 142 and 145°C. However that is not accurate proof under chemical analysis that a compound has formed.

Certainly the combination of Nakajima, Ebisawa or Ninomiya with Rayburn does not teach one skilled in the art that a salt compound is formed. Additionally, any one of Nakajima, Ebisawa et al., or Ninomiya in view of Rayburn does not indicate to those skilled in the art that a salt of a basic amino acid with at least one sweetener has occurred.

Ledniczky et al. note that some medicine is bitter and suggests that these medicines can be made more tasteful by the addition of a sweetener. In particular Ledniczky finds derivatives of the drug substance that has the sweetener such as saccharin as the derivative. There is no indication that Ledniczky recognizes that bitter amino acids can be reacted with a sweetener. In fact Ledniczky particularly discusses hydrochloride salts reacting with saccharin to make a sweetener compound.

Serial# 09/749,136
Docket# 00/141 NUT
Art Unit 1761

Examples 1, 3 & 6 of Ledniczky et al. form a compound using no acid at all. Examples 4 and 5 use citric acid only as a flavor enhancement. None of the Examples mention the need for a strong acid to protonate the sweetener so that a salt compound can be formed of an amino acid and a sweetener.

Certainly the combination of Nakajima, Ebisawa or Ninomiya with Ledniczky does not teach one skilled in the art to form a salt of an amino acid and at least one sweetener.

It is submitted that the claims of the present invention need not be amended in view of the present and prior art because the present prior art does not teach one skilled in the art the limitations of the claims. In view of these comments as submitted that the present application is now in condition for allowance and such is earnestly solicited.

Respectfully submitted,



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